Automatic Lines for Circle Cutting from Coils

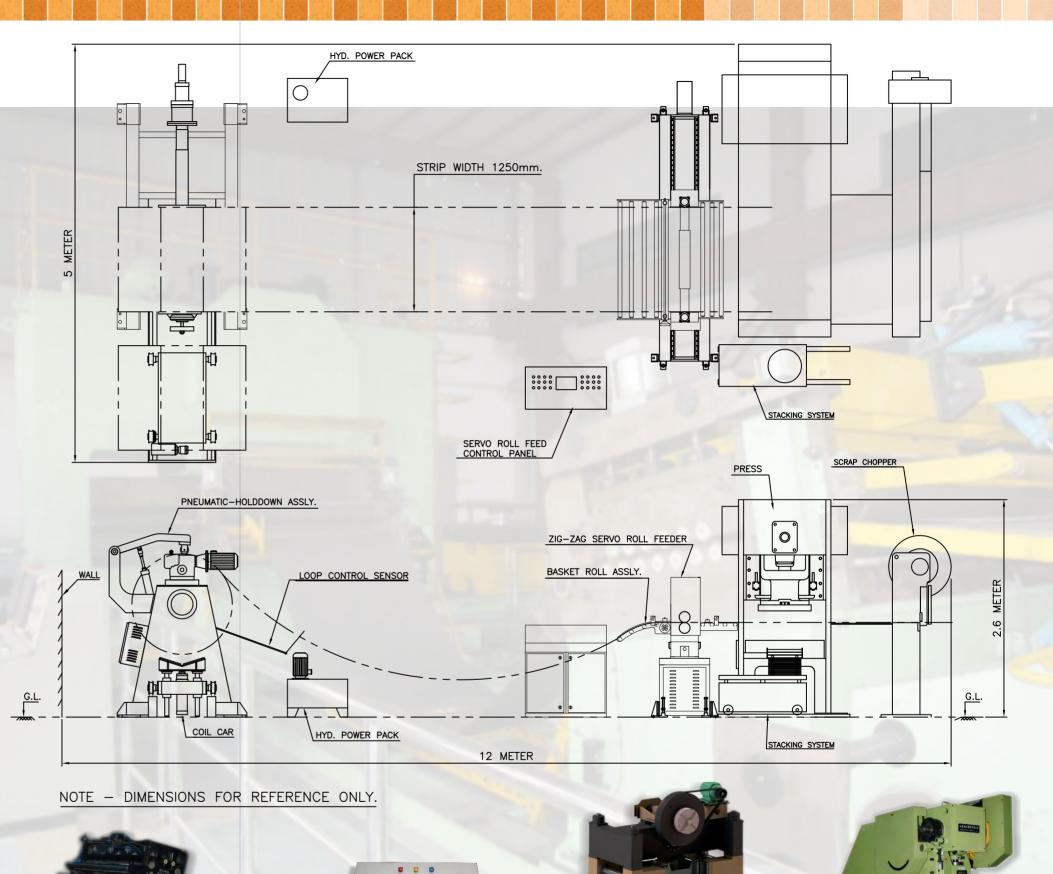
High Quality Product for Stainless Steel Utensils Industry



Automatic Lines for Circle Cutting from Coil

Press Room Automation & Feed Fixtures Pvt. Ltd. manufactures automatic lines for circle cutting from coil with the aim of reducing the scrap quantity by exploiting the whole width of the coil. The technology used by Press Room is shifting of the coil below a fixed die. It is characterised by a good production capacity, high flexibility and low tooling costs. Line consists of decoiler with coil car, straightener, nc zig zag feeder, press, shear & stacker. Entire working sequence is directly managed from Control Panel which allows operator to have a single control of all the line functions.

The strip from the coil can have two movements, both NC servo controlled: the feeding movement (called longitudinal shifting) & the lateral movement (called transversal shifting). Thanks to these movements, each blanking is followed by the lateral movement of the coil of a programmed step and by the blanking of the next disk, up to the realisation of a row of blanked disks along the coil width. At the completion of the row, the strip is fed so that the blanking of a new row can start. Press Room has designed special programme which automatically calculates position depending on stock width & circle diameter. The program allows optimizing the material use, minimizing trimmings line functions.





Decoiler with Coil Car

Straightener



Control Panel

H Frame Press

Deep Throat Press

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Technical Details		Cost Saving / Advantages
Width – 1300 mm	Coil Weight – 5 or 10 Tons	Saving atleast 5 to 8% in material cost.
		Low Tooling Cost.
Thickness – 0.3 to 1.2 mm	Circle Diameter – 100 to 695	Good Production Capacity & High Flexibility.
SPM – 20 to 60	Coil Inner Diameter - 508 mm	The programme allows optimizing the material use, minimizing trimmings line functions.
No of Rows – 1 to 15	Coil Outer Diameter - 1200 mm	The programme shows ideal width for the given no. of rows & circle diameters. It also allows angle change function to accommodate higher no. of rows.

NC Servo Zig Zag Feeder

- The feed head is mounted on a base with linear bearing and rails.
- Zig/zag base is incorporated into main cabinet to allow for pass line height adjustments of 100 mm from the mean.
- Travel of zig-zag is servo driven on a ball screw.
- All zig/zag motion is programmable through the main control.
- High Accuracy can be achieved.
- Standard Mitsubishi Servo, Drive, PLC & HMI package is provided. Others on request.

Motorised Decoiler with Hydraulic Jaw Expansion

- Four Self Centering Coil-location jaws. with Hydraulic Jaws Expansion to provide stability and constant grip.
- The Spindle & Coil holding heads housed in mechanical & precised machined housing & rotates on dust proofed sealed bearing heavy duty anti-friction bearings.
- A.C. Variable Speed Drive System.
- All motorised decoilers are driven through heavy duty gearbox, motor & friction drag brake.
- Control Panel with Suitable loop control system to maintain loop of coil.

Optional

- Mechanical Jaw Expansion.
- Coil hold-down (hydraulic / pneumatics) to calm down the strip & to hold the material
- Coil Car.
- Hydraulic or Servo base movement for decoiler centering.

Higher Capacity Lines for blanking circles in industries like Clutch Plate, Automotive Disc Brakes, LPG Cylinder, etc. are available.

All above equipments are designed for Line speed uptill 15 Mtrs. Per Minute. Models of Higher Capacity or Higher Or Lower Line Speeds are available on request.

Technical specifications are indicative and subject to change to suit end application.

Press Room Automation & Feed Fixtures (India) Pvt. Ltd

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